



**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q80411

BOWERS, et al.

Appln. No.: 10/795,977

Group Art Unit: Unassigned

Confirmation No.: Unknown

Examiner: Bernard Lipman

Filed: March 10, 2004

For: POLYMERIC SURFACE COATINGS

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR §§ 1.97 and 1.98**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450


Sir:

In accordance with the duty of disclosure under 37 CFR §1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form which are all the references of record in parent application No. 10/259,468 as well as application nos. 09/002,861, 08/475,620, 08/175,348, 08/175,348, 08/290,901, 09/117,729, and 09/341,476. Applicant is not submitting duplicate copies of these references but requests that they be listed on the face of any patent granted on the above application. (See 37 CFR §1.98(d)).

BOWERS et al.  
Appln. No. 10/795,977  
Information Disclosure Statement

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Respectfully submitted,

  
\_\_\_\_\_  
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WASHINGTON OFFICE

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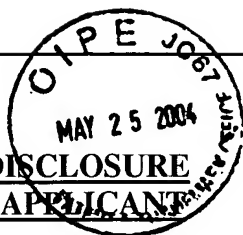
CUSTOMER NUMBER

Date: May 25, 2004

Substitute for Form 1449 A &amp; B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)



Complete if Known

Application Number	10/795,977
Confirmation Number	Unknown
Filing Date	March 10, 2004
First Named Inventor	Roderick William Jonathon BOWERS
Art Unit	Unassigned
Examiner Name	Bernard Lipman
Attorney Docket Number	Q80411

Sheet 1 of 4

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code <sup>2</sup> (if known)		
		US 3,671,502		6/1972	Samour et al.
		US 4,778,865		10/1988	Leighton
		US 4,863,980		9/1989	Cowan et a.
		US 5,002,582		3/1991	Guire
		US 5,270,415		12/1993	Sulc
		US 5,461,433		10/1995	Nakabayashi

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
		CA	1167838		5/1984		
		EP	192831		9/1986		
		EP	0293963		12/1988		
		EP	0537972		4/1993		
		JP	60-204711		10/1985		
		JP	60-179408		1985		
		JP	60-67489		4/1985		
		JP	60-21599		5/1985		
		JP	61-205291		1986		
		JP	63-221184		9/1988		
		GB	1529378		10/1978		
		WO	093/00391		1/1993		

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation <sup>6</sup>
		Ishihara et al., "Improvement of Blood Compatibility on Cellulose Dialysis Membrane," <i>Biomaterials</i> , Vol. 13, No. 3, 1992.	
		Wielema et al., "Zwitterionic Polymers - I. Synthesis of a Novel Series of Poly(Vinylsulphobetaines). Effect of Structure of Polymer on Solubility in Water," <i>Eur. Polym. J.</i> , Vol. 23, No. 12, 1987, pp. 947-950.	
		Ishihara et al., "Protein Adsorption from Human Plasma is Reduced on Phospholipid Polymers," <i>17<sup>th</sup> Ann. Meet. Soc. Biomaterials</i> , May, 1991, pp. 297-298.	
		Kojima et al., "Interaction between Phospholipids and Biocompatible Polymers Containing a Phosphorylcholine Moiety," <i>Biomaterials</i> , Vol. 12, 1991, pp. 121-124.	
		Ishihara et al., "Preparation of Phospholipid Polymers and Their Properties as Polymer Hydrogel Membranes," <i>Polym. J.</i> , Vol. 22, No. 5, 1990, pp. 355-360.	
		Ishihara et al., "Reduced Thrombogenicity of Polymers Having Phospholipid Polar Groups," <i>J. Biomed. Materials Res.</i> , Vol. 24, 1990, pp. 1069-1077.	

Examiner Signature

Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov), MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to indicate here if English language Translation is attached.

Substitute for Form 1449 A & B/PTO  <b><u>INFORMATION DISCLOSURE</u></b> <b><u>STATEMENT BY APPLICANT</u></b>  <i>(use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				Application Number	10/795,977
				Confirmation Number	Unknown
				Filing Date	March 10, 2004
				First Named Inventor	Roderick William Jonathon BOWERS
				Art Unit	Unassigned
				Examiner Name	Bernard Lipman
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		US 3,951,893		4/1976	Gander
		US 4,722,906		2/1988	Guire
		US 4,973,493		11/1990	Guire
		US 5,032,455		7/1991	Dana
		US 5,424,375		6/1995	He
		US 5,453,467		9/1995	Bamford

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		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
		JP	59-43342		3/1984		
		JP	3-39309		1/1991		
		JP	7-051355		2/1995		
		JP	7-184989		7/1995		
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		WO	93/01221		1/993		
		EP	0086186		8/1983		
		EP	0086187		8/1983		

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		Fukushima et al., "Interaction Between the Polymer Containing Phosphorylcholine Group and Cells", <i>Kobunshi Ronbunshu</i> , Vol. 40, No. 12, 1983, pp. 785-793.	
		Kadoma et al., "Synthesis and Hemolysis Test of the Polymer Containing Phosphorylcholine Groups", <i>Kobunshi Ronbunshu</i> , Vol. 35, No. 7, 1978, pp. 423-427.	
		S.M. Park, <i>Journal of Korean Fiber Society</i> , Vol. 29, No. 10, 1992, pp. 32-37.	
		Sakurai et al., "Macromolecules", Vol. 25, No. 26, 1992, pp. 7256-7260.	
		K. Ishihara et al., "Journal of Biomedical Materials Research", Vol. 24, No. 8, 1990, pp. 1069-1077.	
		K. Ishihara et al., <i>Polymer Journal</i> , Vol. 22, No. 5, 1990, pp. 355-360	
		Nakabayashi et al., <i>The 17<sup>th</sup> Annual Meeting of the Society for Biomaterials</i> , Scottsdale, AZ (1991).	

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		Number	Kind Code <sup>2</sup> (if known)		
		US 3,497,482		2/1970	Hwa
		US 3,549,605		12/1970	Dykstra
		US 4,111,922		9/1978	Beede et al.
		US 4,205,152		5/1980	Mizuguchi et al.
		US 5,026,490		6/1991	Peiffer et al.
		US 5,045,593		9/1991	Cowan et al.
		US 5,118,524		6/1992	Thompson et al.
		US 5,162,391		11/1992	Ikari
		US 5,177,168		1/1993	Baron et al.
		US 5,208,295		5/1993	Chaudhuri et al.
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		US 5,264,465		11/1993	Futamura et al.
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		US 5,492,989		2/1996	Chaudhuri et al.
		US 5,712,326		1/1998	Jones
		US 3,634,123		1/1972	Eriksson

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		WO	92/07885		5/1992		
		WO	93/21970		11/1993		
		EP	0079197		5/1983		
		EP	0208421		1/1987		
		GB	2113245		8/1983		
		GB	2161823		1/1986		
		EP	0075957		4/1983		
		EP	0412385		2/1991		
		FR	1549939		12/1968		
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		Campbell et al., "Biocompatible Surfaces Using Methacryloylphosphorylcholine Laurylmethacrylate Copolymer", <i>ASAIJ Journal</i> , 1994.	

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		US 5,342,621		8/1994	Eury
		US 3,453,136		7/1969	Bylsma et al.
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		US 4,945,145		7/1990	Bruylants et al.
		US 5,162,420		11/1992	Chang et al.
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		US 5,648,442		7/1997	Bowers et al.
		US 6,083,257		4/2000	Taylor et al.
		US 6,183,506		2/2001	Penn et al.
		US 5,705,583		1/1998	Bowers et al.
		US 6,090,901		7/2000	Bowers et al.
		US 6,251,964		6/2001	Porssa et al.
		US 6,673,883		1/2004	Rowan
		US 2003-0190405		10/2003	Bowers et al.

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		Yin et al., "Silicon Secondary Crosslinked IPN Based on poly(Methyl Acrylate-Co-Hydroxylethyl Acrylate) and SiO <sub>2</sub> ", <i>Polymer</i> , Vol. 38, No. 20, 1997, pp. 5173-5178.	
		Stratford et al., "Novel Phosphorylcholine Based Hydrogel Polymers: Developments in Medical Device Coatings", <i>Cardiovascular Division, Biocompatibles Ltd.</i> ,	
		Database WPI, Section Ch., Week 9403, Derwent Publications Ltd., London, GB, AN 94-022958, XP002060534 (Abstract)	
		Database WPI, Section Ch., Week 9346, Derwent Publications Ltd., London, GB, AN 93-365463, XP002060535 (Abstract)	
		Database WPI, Section Ch., Week 9312, Derwent Publications Ltd., London, GB, AN 93-096841, XP002060536 (Abstract)	

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